

Your Guide to...

Household Hazardous Waste Regulations



...and other interesting information

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King County Solid Waste Division

Local Hazardous Waste Management Program in King County

What does the law say?

- EPA: RCRA Subtitle C
- Ecology: WAC 173-303
- State Hazardous Waste Management Act
- Local Health Authority



Definition of a Hazardous Waste

- **Listed Wastes:** specific types of discarded chemical products
- **Ignitability:** flash point less than 60°C (140°F)
- **Corrosivity:** pH less than or equal to 2 or greater than or equal to 12.5
- **Reactivity:** explosive, normally unstable and readily undergoes violent change, generates toxic gases and/or reacts violently with water.
- **Toxicity:** Federal Criteria-- Toxicity Characteristic Leaching Procedure (TCLP)
Washington State-- LD-50, LC-50, and bioassay.

Washington Regulations

- Latex paint; Hair shampoo; Hair conditioner; Liquid dishwashing soap; Liquid hand cleaner; Hand lotion; Glass cleaner; Bubble bath are Dangerous Wastes in Washington State

Washington Regulations

- **Latex Paint:** Many contain $> 1\%$ 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (Texanol) and/or Ethylene Glycol Monobutyl Ether. May also contain HOC $> 0.01\%$. If concentrations exceed these criteria the paint designates as a Toxic Dangerous Waste. Since this is a liquid waste, it cannot designate as a special waste. The waste is not approved to go to the landfill.

Washington Regulations

- **Hair shampoo:** Two of the ingredients, salicylic acid and sodium lauryl sulfate are Toxic D according to RTECS. Shampoos contain >10% Toxic D ingredients and designate due to toxicity. Since this is a liquid waste, it cannot designate as a special waste. The waste is not approved to go to the landfill.

Washington Regulations

- **Hair conditioner:** Ten ingredients listed are Toxic D according to RTECS. Since most of these ingredients are at a concentration of 1% or greater, it is likely that the concentration of Toxic D ingredients are 10% or greater. Since this is a liquid waste, it cannot designate as a special waste. Therefore, this waste is not approved to go to the landfill.

Washington Regulations

- **Liquid dishwashing detergent:**
Products contain sodium lauryl sulfate in the range of 13-17%. Detergents containing >10% Toxic D ingredients designate as dangerous waste due to toxicity. Since this is a liquid waste, it cannot designate as a special waste. The waste is not approved to go to the landfill.

Washington Regulations

- **Liquid hand soap:** Four of the ingredients listed are Toxic D according to RTECS. Concentration of sodium lauryl sulfate in the range of 13-17%. Soaps containing >10% Toxic D ingredients designate as dangerous waste due to toxicity. Since this is a liquid waste, it cannot designate as a special waste. The waste is not approved to go to the landfill.

Washington Regulations

- **Glass cleaner:** Cleaner contains two toxic ingredients, 2-Butoxyethanol (Toxic C) and Ethylene glycol ethyl ether (Toxic D) at 0.5-1.5%. Waste is a dangerous waste. Material is a toxic dangerous waste and is not allowed to go to the landfill.

Washington Regulations

- **Bubble Bath:** concentration of sodium lauryl sulfate is $>10\%$ in most of these products. Therefore, this waste designates as dangerous waste due to toxicity and is not approved to go to the landfill. Since this is a liquid waste, it cannot designate as a special waste.

Washington Regulations

- Scrubbing Bubbles Bathroom Cleaner, Powder Bleach Cleaner, Mildew Stain Remover and TSP are not Dangerous Wastes.

What is a Household Hazardous Waste?

- **A Household Hazardous Waste is any waste that meets the definition of a Hazardous Waste, and is generated in a household (household waste).**

What is a Household Waste?

- Household waste means any waste material (including, but not limited to, garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Household Hazardous Waste

- Must be derived from operations and maintenance of a household versus construction or demolition.
- Maintenance includes repainting and lead paint removal.
- Once an HHW always an HHW

What are the Regulations for Handling Household Hazardous Waste

In Washington and most other states, HHW management is regulated by local solid waste handling rules implemented by local health districts or departments and must meet the requirements of the statewide regulations (for Washington these are contained in WAC 173-350).

HHW Generators and Acceptance Policies

<u>Groups</u>	<u>HHW?</u>	<u>Accepted</u>
Marina owner	Some	No (live aboard - yes)
Realtors	Most	No
Paid hauler	Most	No
Home Contractor/ Painter	Most	No
Multifamily owners	Yes	Yes (under 4 units)
Charity donations	Mostly	Yes (BMPs)
Airport Confiscations	No	No

CESQGs

- Less than 220 pounds/mo; 2200 pounds total (2.2/220 if acutely haz)
- Exempt from Hazardous Waste Rules *IF:*
 - Wastes are designated
 - Manage wastes so as to not pose a threat to health or the environment
 - Manage wastes at a TSDF, MRW, Recycling Facility, Municipal Solid Waste Facility, or POTW

Regulations Summary

- ◆ Medium and Large Business Hazardous Waste
 - Highly regulated - State and Federal Oversight
- ◆ Household Hazardous Waste and CESQGs (Moderate Risk Waste or MRW)
 - Fewer regulations - Local and some State Oversight